GSM signal Booster for GSM mobile signal ST900&AGC mobile signal booster for home Max coverage 100sqm

What is the booster?

Cell phone signal booster (also named repeater, amplifier) is a product designed to solve the mobile phone blind signal. As the mobile phone signal is transmitted by electromagnetic waves to establish a communications link, however there are a lot barriers make it is unavailable to get sound signal. When people enter some tall buildings, some places basement malls, restaurants and parking lot, some places of entertainment such as karaoke sauna and massage, some public place such as subway, tunnel and etc. where cell phone signals can not reach, now the cell phone signal booster can solve these problems! The entire range of mobile phone signals can be well used; we all will get great convenience and benefit from sound signal. Our boosters are the perfect solutions for a wireless improvement in the mobile reception!

No more dropped calls!
No more poor reception!
No more running to the windows or going outside to talk on your mobile phone!
Now you can reach everywhere with signal boost boosters!

ST900&10dBm mobile phone signal booster specification

Frequency range	**uplink:890-915MHz Downlink: 935~960MHz**	**Gain**	**Up link: Gp≥51dB Downlink: Gp≥53dB**
output	**Up link :10dBm Downlink: 10dBm**	**Function**	**a) Power supply LED denote b) Export power LED denote**
Port VSWR	**≤1.8DB**	**I/O impedence**	**50Ω/N connector**
Noise figure	**≤6dB**	**Transmission delay**	**≤0.5μs**
Ambient temperature	**-15°C~55°C**	**Power supply**	**AC/220V±10% 45~55Hz**
Size/weight	**134*105*28MM/450g**	**Coverage area**	**100sqm**

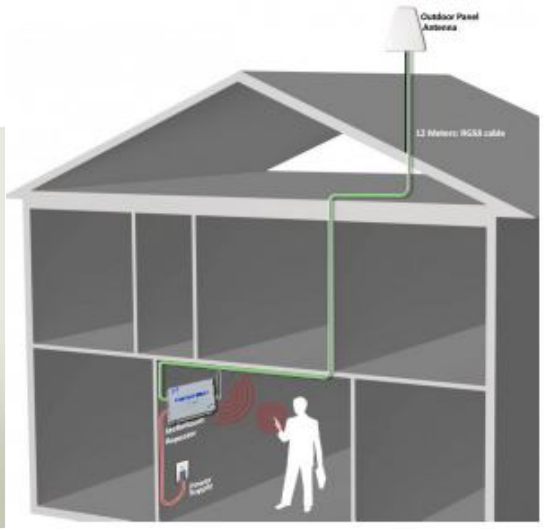
ST-900A Mobile Phone Signal Repeater complete set introduction

1. **If you need a 900mhz signal booster for your personal home use , We recommend you choose the easy installation Opion.**

Complete set including :
1 pc Repeater ST-900A
1 pc outdoor LAP antenna
1 pc indoor Whip antenna
8meters cable for outdoor antenna connector
1 pc power supply

The Above complete set installation Steps :

Step 1 : Set the outdoor antenna at the place where have a good signal ;
Step 2: Use the 10meters cable to connect the outdoor antenna and the repeater (outdoor side);
Step 3: connect the indoor whip antenna on the repeater directly ;
Step 4:Plug the power supply , the repeater will work fine ,and your mobile signal be 5bars immediately !



2. If you need the GSM900mhz Repeater for office/home coverage 100sqm ,We recommend you choose the option as follows :

Complete set including :
1 pc Repeater ST-900A
1 pc outdoor Yagi or LAP antenna
1 pc indoor Omni antenna
8meters cable for outdoor connection
3meters cable for indoor connection
1 pc power supply

The Above complete set installation Steps :

1. Install the outdoor antenna option to the good signal place or Basestation direction;

2. Use the 8meters cable to connect the outdoor antenna and repeater ”outdoor side “

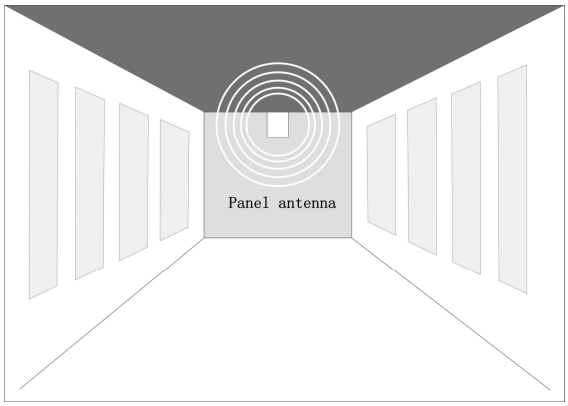
3. Use the 3meters cable to connect the indoor antenna and the repeater “indoor side “

4. Plug the power supply, the repeater will work fine ,and your mobile signal be 5bars immediately !

(Please pay attention , Never plug the power supply before you confirmed antenna and cable be connected well , otherwise the repeater will may be broken.)

3. If you need the GSM900 Repeater for a long Corridor coverage 100sqm ,We recommend you choose the option as follows :

Complete set including :
1 pc Repeater ST-900A
1 pc outdoor Yagi or LAP antenna
1 pc indoor Panel antenna
8meters cable for outdoor connection
3meters cable for indoor connection
1 pc power supply



The Above complete set installation Steps :

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4. Use the 3meters cable to connect the indoor antenna and the repeater “indoor side “

5. Plug the power supply, the repeater will work fine ,and your mobile signal be 5bars immediately !

(Please pay attention , Never plug the power supply before you confirmed antenna and cable be connected well , otherwise the repeater will may be broken.)

The ST-900A With 3 LED indicates :POWR LED/DL LED/UL LED

LED	Status	Definition
Power	**Red**	Normal
	Off	DC power problem
DL(Downlink)	**White**	No signal received
		Solution: Adjust the outdoor installation to get sound signal(see page 14)
	Green	Signal received ok but not perfect
		Solution: Adjust the outdoor installation to get sound signal(see page 14)
	Red	Full signal received
UP(Uplink))	**Flicker**	When there is a call, it is normal
	Green	Always green means self-excited
		Solution: Turn off the booster, adjust the indoor and outdoor antenna again, and try to expand the distance or create some barriers between them.

Features of the GSM Signal Repeater ST-900A

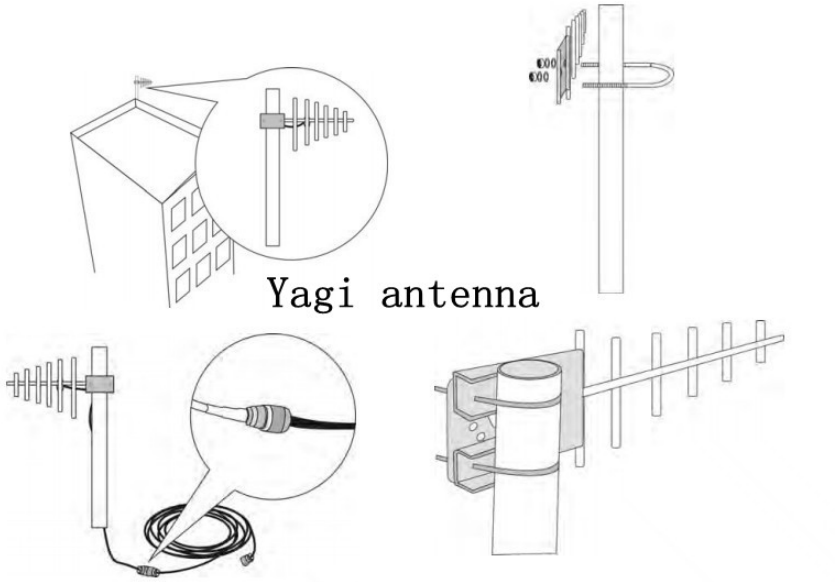
- Elegant appearance, mini size, light weight
- Easy installation.
- No interference to the base station, no harm to people health.
- CE & RoHS proved.
- Low consumption.
- ALC technology.
- Stable performance.
- Environment Friendly, Energy-Efficient.
- Comply to the ETS300 694-4 standard
- Comply to the GB6993-86 standard
- Wide band repeater to support signals of all operators.
- High-integration (One board to contain low-noise amplifier, frequency selection module, power amplifier module, both uplink and downlink one for all).
- Manual gain control, Automatic gain control, Artificial Intelligence function can protect the repeater together the BTS perfectly.
- Auto shut off function as final step to avoid severe interference with mobile net network and energy saving.

Installation of outdoor antenna

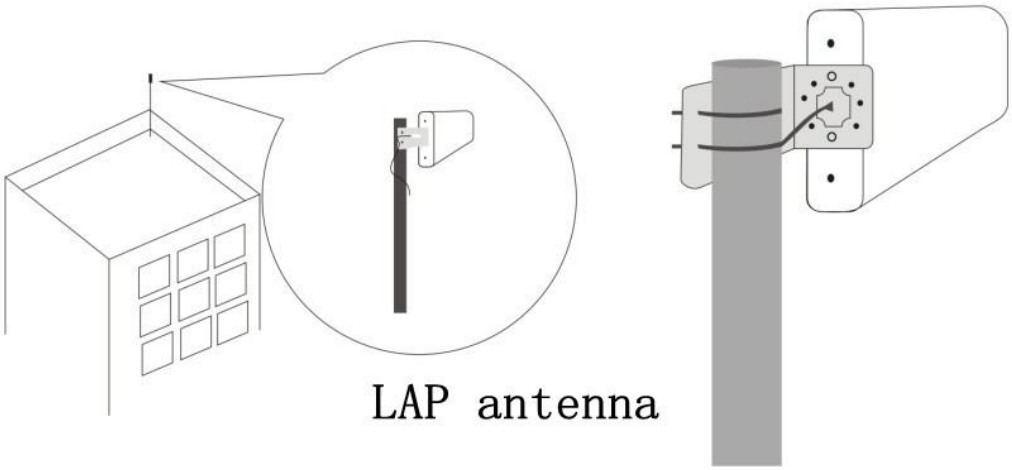
The signal strength from the outdoor antenna directly affects the efficiency of the indoor coverage, so it is very important to choose the outdoor antenna location to get the best signals.

- Select the top of building, the window or the balcony to install the outdoor antenna where there is with sound signal.
- Testing the signal strength received from outdoor antenna by mobile phone from different direction, and it shall display full bar signals where the outdoor antenna installed.
- Fix the outdoor antenna after selecting the best position, and adjust slightly its height or angles in order to get the best signals.
- The phone calls or data transmission shall be smooth and stable by 3 times testing where the outdoor antenna installed.

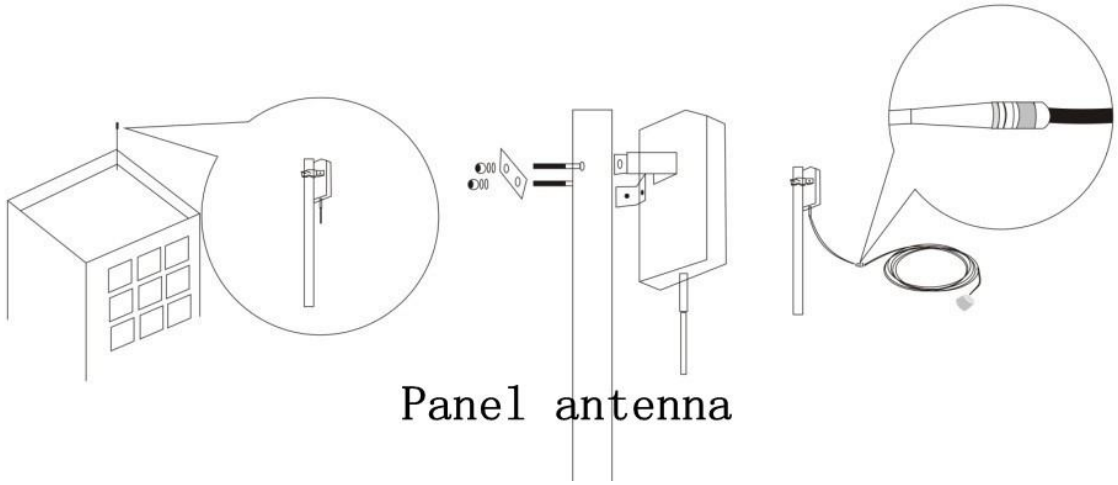
Installation of Yagi antenna as outdoor antenna



Installation of LAP antenna as outdoor antenna

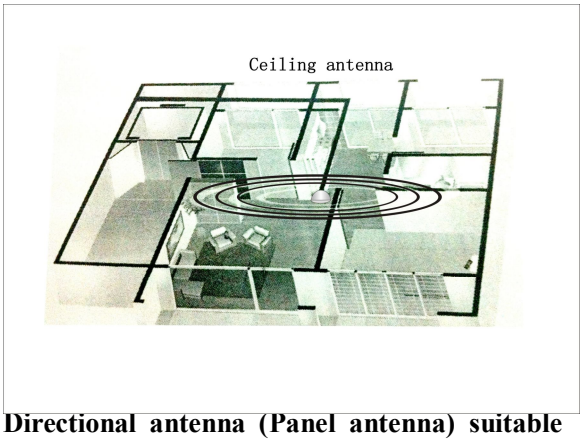


Installation of Panel antenna as outdoor antenna

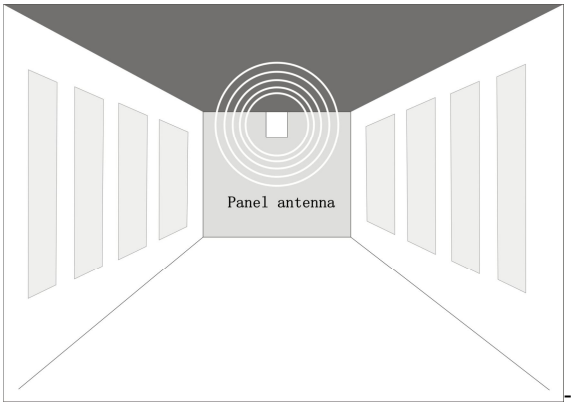


5.4 Installation of indoor antenna

Omni antenna (Indoor ceiling antenna or whip antenna), suitable for installing in the center and radiate all directions.



Directional antenna (Panel antenna) suitable for the coverage shape is long and narrow, like corridors, tunnels or elevators, etc. (The directional antenna is good for isolation from outdoor antenna)



Note: Attention on the install of outdoor antenna and indoor antenna

Booster is a two-way signal amplifier, so proper isolation between outdoor antenna and indoor antenna is necessary in order to avoid self-oscillation. About the definition for self-oscillation, take MIC and Loudspeaker for example, if it is too close for each other, it could make big noise. And the minimum distance between outdoor antenna and indoor antenna shall be 5 meters. Again if the two antennas install in the same level, then the direction of outdoor antenna and indoor antennas shall be opposite (in this case, the directional antenna will be a good choice). If the isolation can't be achieved by the limited distance, the roof of the building or any other barriers can be put between two antennas to increase isolation.

5.6. How to install the connectors to the cable?

5.7. Installation of booster

The booster can only be installed indoor, and can not turn on the power of booster until all accessories is settled correctly!

Booster's ports description

1) Outdoor port: Connect with the outdoor antenna by cable and connector
2) Indoor port: Connect with the indoor antenna directly or by cable and connector
3) Power: connect with power supply

ST900A Signal Repeater AGC Function

What is AGC function? And what is the advantage?

AGC means Auto Gain Control; it means the booster can control the gain by itself according to the surroundings.

- When there is a sudden strong signal input, the booster can adjust the gain accordingly to protect the booster module together BTS station, make the strong signal will not affect the BTS after adjustment.
- When the signal outside is too weak, the booster can adjust the gain to full stage to boost the signal received at most for end use.
- The AGC repeater is with LED on it, it can directly show the running state of the booster.